Amendments to the Claims

1. (currently amended) A method for background adjustment, the method comprising:

~~a)~~ estimating a background lightness level in an original image;

~~b)~~ converting pixels in the original image to a luminance-chrominance color space, wherein pixels having lightness levels substantially equal to the background lightness level are mapped as background pixels such that their lightness values are set substantially equal to a value corresponding to white;

~~c)~~ comparing chroma values for the background pixels to at least one threshold;

~~d)~~ adjusting lightness levels for any background pixels having chroma values above a first threshold to a new lightness level indicating that color of that pixel is to be preserved, producing lightness adjusted pixels;

~~e)~~ removing chroma from any background pixels having chroma values below a second threshold indicating that the color of that pixel should be removed, producing color adjusted pixels; and

~~f)~~ converting to a color space of an output device, wherein conversion is performed on all pixels including any lightness adjusted pixels and color-adjusted pixels.

2. (original) The method of claim 1, wherein estimating a background lightness level further comprises building histograms of each line of the original image and then determining a high peak value in the histograms.

3. (original) The method of claim 2, wherein determining a high peak value in the histograms further comprises using a minimum white to determine if the high peak value is used in estimating overall background lightness level.

4. (original) The method of claim 1, wherein the first and second thresholds are substantially equal to 20 for text mode, and 10 for all other modes.

5. (original) The method of claim 1, wherein the value corresponding to white is 255

6. (original) The method of claim 5, wherein the new lightness level is substantially equal to 254.

7. (original) The method of claim 1 wherein color is removed from a pixel by setting the chrominance components of that pixel value in the luminance-chrominance color space substantially equal to zero.

8. (original) The method of claim 1, wherein the color space of the output device is CMYK space.

9. (original) The method of claim 1, wherein the color space of the output device is CMY space.

10. (original) The method of claim 1, wherein the color space of the output device is RGB space.

11. (original) The method of claim 1, wherein the first and second thresholds are equal.

12. (canceled)

13. (original)

14. (original)

15. (currently amended) A color reproduction device, comprising:

~~a)~~ a scanning module operable to scan a color original and produce input data representative of the color original;

~~b)~~ a background suppression module operable to:

~~i)~~ determine a background lightness level; and

~~ii)~~ map pixels of input data to luminance-chrominance color space such that pixels having a lightness level substantially equal to the background lightness level are mapped as background pixels having a lightness value corresponding to white;

~~c)~~ a chroma adjustment module, operable to:

~~i)~~ ——determine if chroma values for the background pixels are above a threshold;

~~ii)~~ ——adjust any background pixels having a chroma value above the threshold to a lightness level different from the lightness corresponding to white; and

~~iii)~~ ——remove chroma from any background pixels having a chroma value below the threshold; and

~~d)~~ ——an output conversion module, operable to convert all pixels in the luminance-chrominance color space to an output space.

16. (original) The color reproduction device of claim 15, wherein the device is a copier.

17. (original) The color reproduction device of claim 15, wherein the device is a fax machine.

18. (original) The color reproduction device of claim 15, wherein the background suppression module includes lookup tables operable to map the pixels of input data to luminance-chrominance color space.

19. (original) The color reproduction device of claim 18, wherein the lookup tables are only used on pixels with values other than the value corresponding to white.